

W JUL 28 1958 *

PFISTER CORN CO., EL PASO, ILL.

187 HYBRID GUIDE



Lester Pfister shows some typical ears of Single-Cross that he has just picked in the field behind him.

On the front cover . . . Walter and Jerry chat with their father over some sample ears of 187 Hybrids during a Demonstration Day on Lester Pfister's farm at El Paso, Illinois.

History Repeats Itself

TIME FOR ANOTHER CHANGE!

By Lester Pfister

It is interesting to recall the many changes that have taken place on corn belt farms since I was a boy over forty-five years ago. Then we farmed with horse and man power.

I recall husking corn by hand in 1912. It was Reid's Yellow Dent — by far the most popular corn grown at that time — and until 1925 when the Krug corn became available. Like the Reid's the Krug selection was a cross of two openpollinated strains. Fifty to sixty bushels per acre was considered a very good yield in a good crop year.

Both the Reid and Krug selections had relatively weak stalks, shallow roots, and often as high as 15% barren stalks along with from three to ten percent rotten ears. There was plenty of room for improvement even though the Krug variety was good enough to win the Banner Trophy in the 1926 Iowa State Corn Yield Test.

By 1935 several double cross hybrids had been developed and proven better than the best open-pollinated strains. The only practical way hybrid seed producers could supply the demand was by growing seed as double crosses. The yield, quality, and standability were all better than the open-pollinated. In fact, hybrid corn stand-

AVERAGE ACRES PER BUSHEL OF SEED HILL DROP 2 KERNELS PER HILL

Row Spacing 3'4"

					,		
pod sod y lin	MF	MLF	LF	МТ	MLT	MR	MLR
19" spacing	4.59	3.95	3.61	4.24	3.83	4.08	3.65
25" spacing	6.04	5.20	4.76	5.58	5.04	5.37	4.80
29" spacing	7.01	6.04	5.52	6.47	5.85	6.23	5.57
33" spacing	7.98	6.87	6.28	7.37	6.66	7.09	6.34

At 3 per hill reduce acreage by $\frac{1}{4}$

At 4 per hill reduce acreage by ½

AVERAGE ACRES PER BUSHEL OF SEED

Checked at 3'4" x 3'4"

0178 6710	MF	MLF	LF	МТ	MLT	MR	MLR
3 kernels per hill	6.30	5.43	4.97	5.83	5.27	5.61	5.02
4 kernels per hill	4.73	4.08	3.73	4.37	3.95	4.21	3.76

MAKING A YIELD CHECK

Find Ear Corn Yield

First:

Husk and weigh the corn in the number of HILLS as shown on the table for check-rowed corn. If drilled, refer to drilled corn table, and husk and weigh the number of LINEAL FEET as shown. The result in pounds represents the EAR CORN YIELD per acre in bushels at 70 pounds per bushel. Next, correct for shelled corn yield.

Correct for Shelled Corn Yield

Second:

Shell 20 pounds of the ear corn and multiply the shelled corn weight by 5. The result is the shelling percentage. 80% is the standard shelling percentage on the basis of 56 pounds of shelled corn from 70 pounds of ear corn. Multiply the ear corn yield by the percent above or below 80%. ADD this result to the ear corn yield if ABOVE 80% or SUBTRACT if BELOW 80%. The result is the SHELLED CORN YIELD. Next, correct for moisture.

TABLE FOR DRILLED CORN

3 Ft.	3 Ft2 In.	3 Ft4 In.
207 Ft.	196 Ft.	186 Ft.
5 In.	5 In.	6 In.

(Measure and Husk the number of Lineal Feet as shown in above chart corresponding to the distance between rows.)

TABLE FOR CHECK-ROWED CORN

				3 Ft.	3 Ft.
			3 Ft.	2 In.	4 In.
3 Ft.,	0	In	69	65	62
				62	
				59	
				56	

(Measure the distance between rows and between hills. Husk the number of hills shown on chart. Example: If corn is planted 3 Ft., 4 In. x 3 Ft., 6 In., husk 53 hills.)

HOW TO CORRECT EAR CORN YIELD FOR SHELLING PERCENTAGE

To determine the number of bushels of shelled corn represented by a given number of bushels of ear corn, use the following method: Shell 20 pounds of ear corn and weigh the shelled corn. With this weight of shelled corn refer to the table below. The percentage figure opposite the weight of shelled sample is then multiplied by the number of bushels of ear corn. This will give the number of bushels to be subtracted from or added to the original ear corn bushelage. For example: 100 bushels of ear corn (at 70 lbs.) which gives 14 lbs. of shelled corn from a 20-pound ear sample indicates that 12.5% is to be deducted. On the basis of 100 bushels, this would mean that you actually had only 87.5 bushels of shelled corn.

Weight of		Weight of		
Shelled	% to	Shelled	% to	
Sample	Subtract	Sample	Add	
14.0	12.5	16.0	0.0	
14.1	11.9	16.1	0.6	
14.2	11.2	16.2	1.2	
14.3	10.5	16.3	1.9	
14.4	10.0	16.4	2.5	
14.5	9.4	16.5	3.1	
14.6	8.7	16.6	3.7	
14.7	8.1	16.7	4.4	
14.8	7.5	16.8	5.0	
14.9	6.9	16.9	5.6	
15.0	6.2	17.0	6.3	
15.1	5.6	17.1	6.9	
15.2	5.0	17.2	7.5	
15.3	4.4	17.3	8.1	
15.4	3.7	17.4	8.7	
15.5	3.1	17.5	9.4	
15.6	2.5	17.6	10.0	
15.7	1.9	17.7	10.5	
15.8	1.2	17.8	11.2	
15.9	0.6	17.9	11.9	
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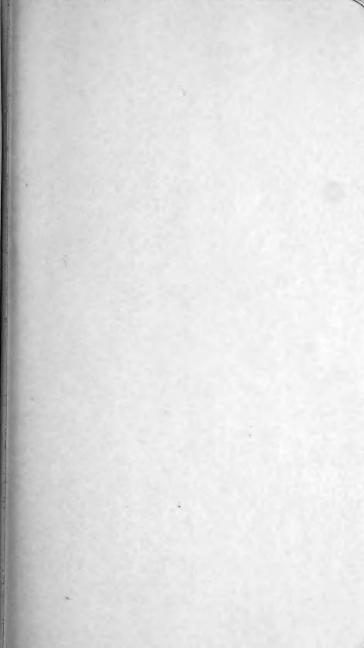
HOW TO CORRECT YIELDS FOR MOISTURE CONTENT

At the same time you weigh your crop, shell a 2 lb. sample and seal in a fruit jar or glassine bag. Take it to your elevator to have moisture test made.

After determining the actual moisture in sample, refer to table below. If corn is below 15.5% moisture, add weight in the amount of the percentage indicated. If corn is above 15.5% moisture, subtract an amount equal to the percentage indicated opposite the moisture in corn. For example: 100 bushels of corn with 10.5% moisture is equal to 105.9 bushels of 15.5% moisture corn or 100 bushels plus 5.9%.

% Moisture	% to	% Moisture	% to
in Corn	Add	in Corn	Add
10.5	5.9	13.0	3.0
11.0	5.3	13.5	2.4
11.5	4.7	14.0	1.8
12.0	4.1	14.5	1.2
12.5	3.6	15.0	0.6
% Moisture	% to	% Moisture	% to
in Corn	Subtract	in Corn	Subtract
15.5	0.0	20.5	5.9
16.0	0.6	21.0	6.5
16.5	1.2	22.0	7.7
17.0	1.8	23.0	8.9
17.5	2.4	24.0	10.1
18.0	3.0	25.5	11.8
18.5	3.6	30.5	17.8
19.0	4.1	35.5	23.7
19.5	4.7	40.5	29.6
20.0	5.3	50.5	41.4











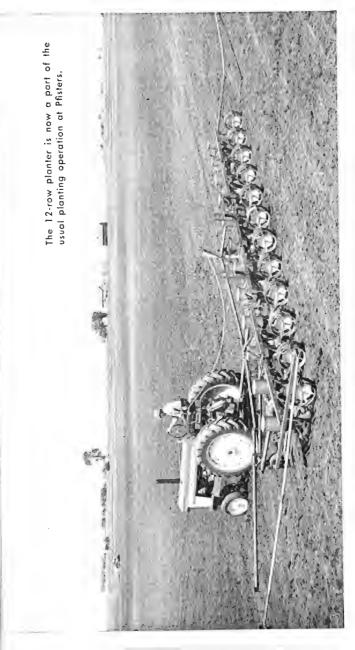


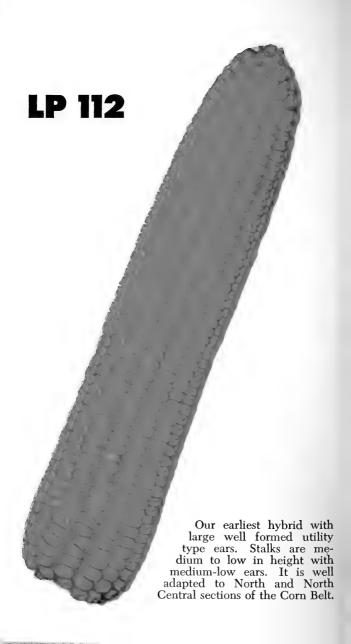


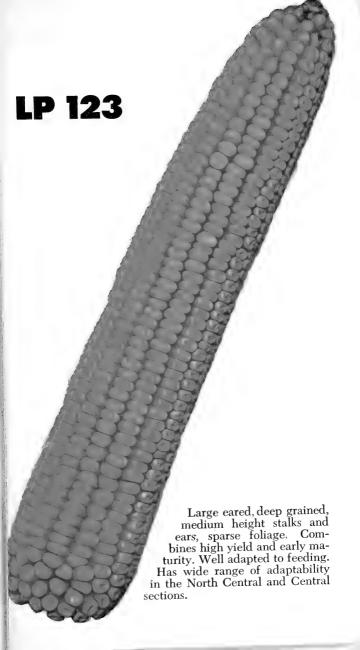


Lester Pfister (above) is the dirt farmer whose meticulous perseverance developed the famous Pfister 187 Inbred from which he later produced "The 187 Hybrids" shown and described on the following pages. From the wide range of characteristics in these hybrids you can pick one or more that will produce well on your farm and prove to be a good investment for you.









BE YOUR OWN



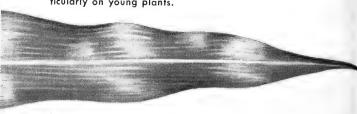
NITROGEN hunger sign is yellowing that starts at tip and moves along middle of leaf.



POTASH deficiency appears as a firing or drying along the tips and edges of lowest leaves.



PHOSPHATE shortage marks leaves with reddish-purple, particularly on young plants.



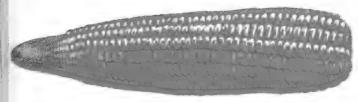
HEALTHY leaves shine with a rich dark green color when adequately fed.

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CORN DOCTOR



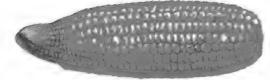
SMALLER THAN NORMAL SIZED EARS usually are a sign of low fertility. For better yields, boost fertilizer application.



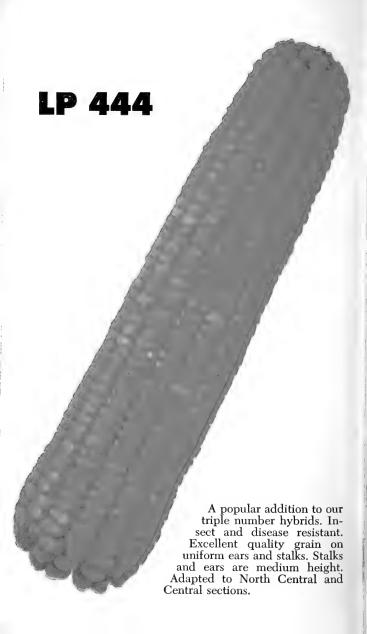
POTASH shortage shows up in ears with poorly filled tips and loose chaffy kernels.

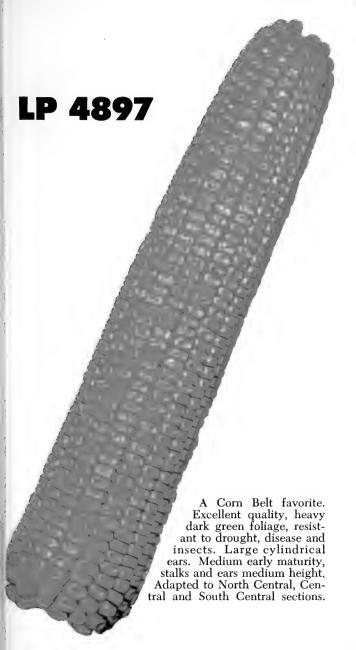


PHOSPHATE shortages interfere with pollination and kernel fill. Ears are small, often are twisted and with undeveloped kernels.

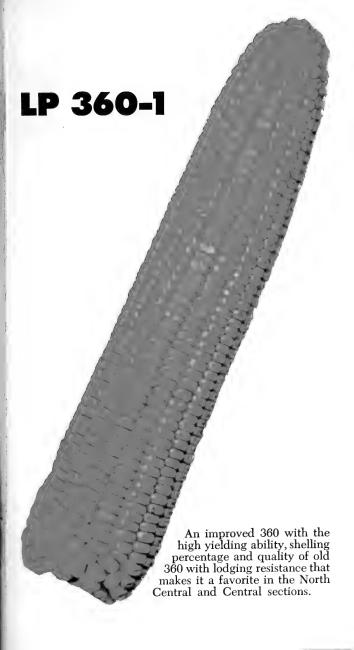


NITROGEN is essential throughout the growing season. If plant runs out of nitrogen at critical time, ears are small and protein content is low. Kernels at tip do not fill.









PURE Single-Cross HYBRID

Now available to farmers who want the best in seed corn

Here is what you get:

- 1. 10 to 20 or more bushels increase in yield
- 2. Unequaled Standability
- 3. Clean and easy picking at all times
- 4. High tolerance to corn borers and other insects
- Drought and wilt resistant
- 6. Uniformity and high quality found only in a Pure Single Cross

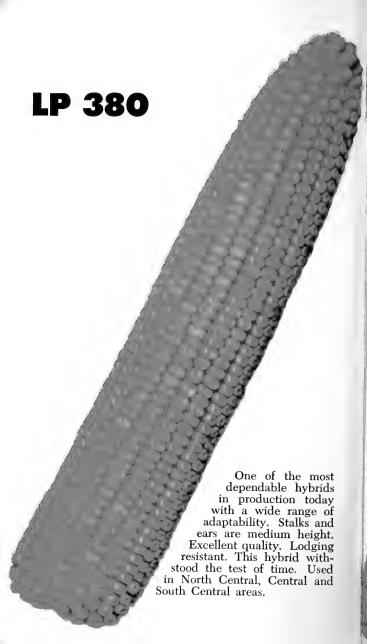
Lester Ofister

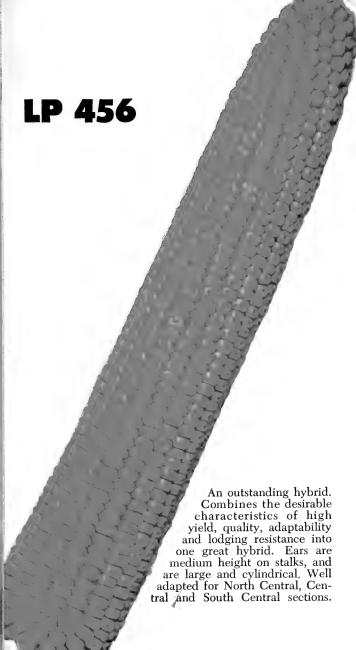
ORDERS FOR 1959 PLANTING will be accepted in the order received and in proportion to double cross seed purchased.

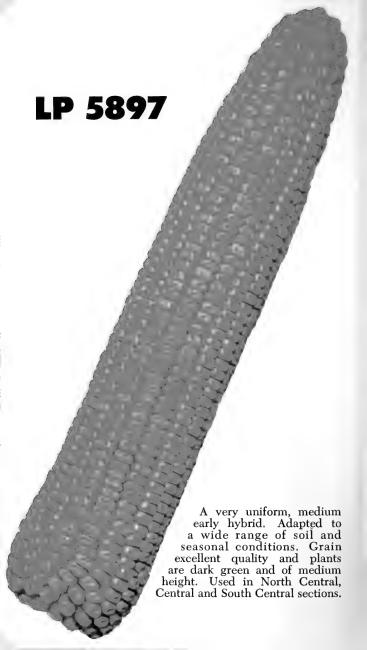
"You cannot buy this hybrid anywhere else at any price"

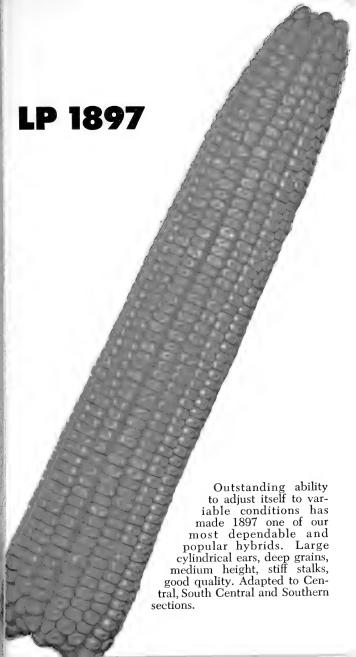
SEE YOUR 187 HYBRID DEALER NOW



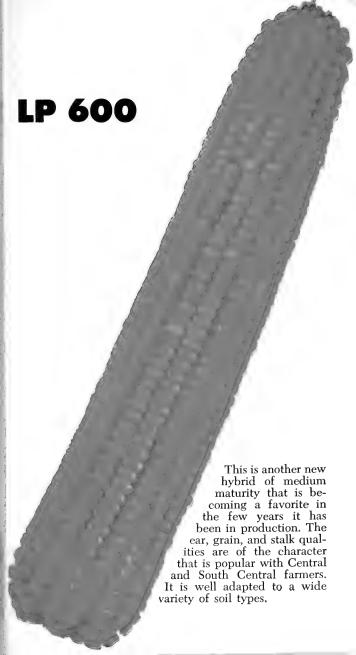


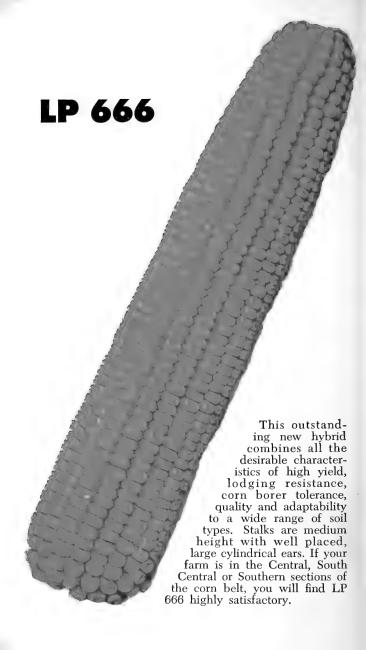


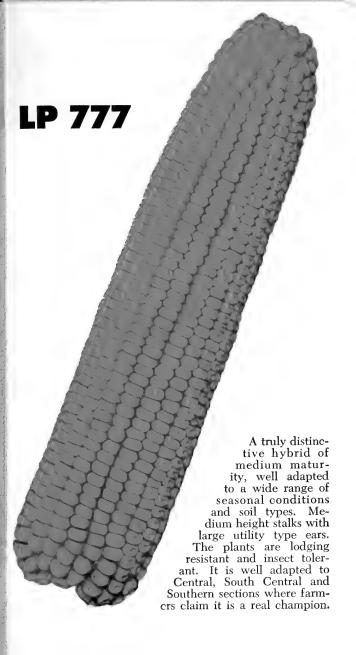














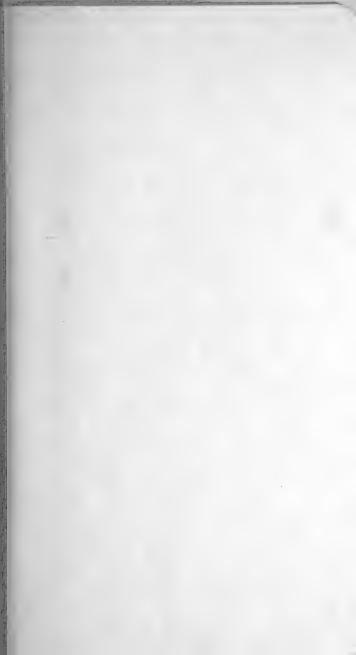
The PROOF of the Pudding — heavy, well-filled ears uniformly spaced on sturdy stalks standing in line for the picker. This is a field of 187 Hybrids.



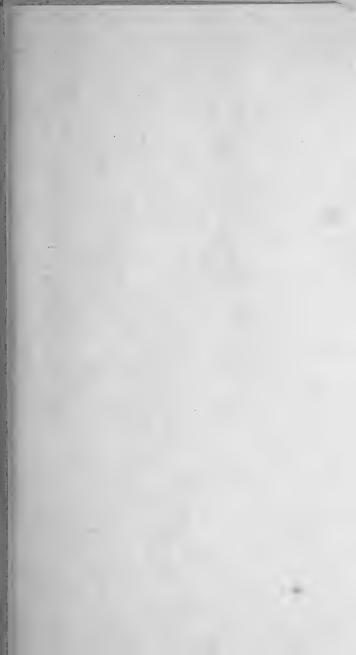














GENERAL INFORMATION

Dry Measure

2 pints	1 qt.
8 quarts	I peck
Note: A bushel contains 2150.42 cu.	in.

Linear Measure

12 inches	.1 foot
3 feet	1 yard
5½ yards	or pole
16½ feet	or pole
40 rods1 f	furlong
8 furlongs1 statut	te mile
320 rods	1 mile
5280 feet	1 mile

U.S. Government Land Measure

A township = 36 sections each 1 mile square.

A section = 640 acres.

A quarter section, half a mile square = 160 acres.

An eighth section, half a mile long and a quarter mile wide = 80 acres.

Other Land Measures

10 rods by 16 rodsI	acre
5 rods by 32 rods	acre
4 rods by 40 rods1	acre
5 yards by 968 yards1	acre
40 yards by 121 yards1	acre
20 yards by 242 yards	acre
20 yards by 198 feet	acre
110 feet by 396 feet	acre
110 feet by 396 feet	acre
60 feet by 726 feet	acre
300 feet by 145.2 feet	acre
4840 square yards1	acro

Square Measure

144 sq. in square foot
9 sq. feet1 square yard
30¼ sq. ydsl square rod
272¼ sq. ft1 square rod
160 sq. rods acre
640 acres1 square mile

HOW TO COMPUTE CAPACITY OF CRIBS

Square or Rectangular Cribs

Multiply the length by the width by the depth of grain (all in feet). Multiply this sum by 2 and divide by 5. The result is the number of bushels ear corn at 70 lbs. per bu. Correct for shelling percentage and moisture as directed on preceding pages.

Round Cribs

Multiply the diameter (distance across center) by the diameter. Multiply this sum by the depth (all in feet). Multiply the sum by .315. The result is bushels at 70 lbs. per bu. Correct for moisture and shelling percentages.

Piles of Corn

When heaped in form of a cone: Square the depth and square the inches of slant height (i.e., multiply each by itself). Subtract the lesser of these amounts from the greater. Multiply the difference obtained by the depth in inches. Multiply this product by .0024. The result is the bushels shelled corn at 70 lbs. bu. basis. Correct for moisture and shelling percentage. When corn is heaped against a straight wall divide this result by two.

The above formulas give bushels of 70 lb. basis ear corn. For shelled corn capacities in bushels double number bushels ear corn and correct for moisture content.

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Maximum hybrid vigor, yield, quality, standability, insect tolerance and drought resistance can be obtained only by crossing two pure, unrelated, adapted inbred lines as a pure single cross.

With recent improvement in inbred lines — plus new and modern production methods—it is now possible and practical to produce this type of hybrid seed in large volume and at a reasonable cost to corn belt farmers.

Lester Ofister